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Dichiarazione di conformità sintetica

Ai sensi dell'art. 2 comma 3 del D.M. 275 del 30/10/2002

Si dichiara che questo prodotto è conforme alle normative vigenti e soddisfa i requisiti essenziali richiesti dalle direttive

2004/108/CE, 2006/95/CE e 1999/05/CE

quando ad esso applicabili

Short Declaration of conformity

We declare this product is complying with the laws in force and meeting all the essential requirements as specified by the directives

2004/108/CE, 2006/95/CE and 1999/05/CE

whenever these laws may be applied

Table of Contents

CHAPTER 1: INTRODUCTION

1.1 BEFORE YOU START

Thank you for choosing our product. Before you start installing the motherboard, please make sure you follow the instructions below:

- Prepare a dry and stable working environment with sufficient lighting.
- Always disconnect the computer from power outlet before operation.
- Before you take the motherboard out from anti-static bag, ground yourself properly by touching any safely grounded appliance, or use grounded wrist strap to remove the static charge.
- Avoid touching the components on motherboard or the rear side of the board unless necessary. Hold the board on the edge, do not try to bend or flex the board.
- Do not leave any unfastened small parts inside the case after installation. Loose parts will cause short circuits which may damage the equipment.
- Keep the computer from dangerous area, such as heat source, humid air and water.
- The operating temperatures of the computer should be 0 to 45 degrees Celsius.

1.2 PACKAGE CHECKLIST

- Serial ATA Cable X 2
- Rear I/O Panel for ATX Case X 1
- User's Manual X 1
- Fully Setup Driver DVD X 1
- USB 2.0 Cable X1 (optional)
- Serial ATA Power Cable X 1 (optional)

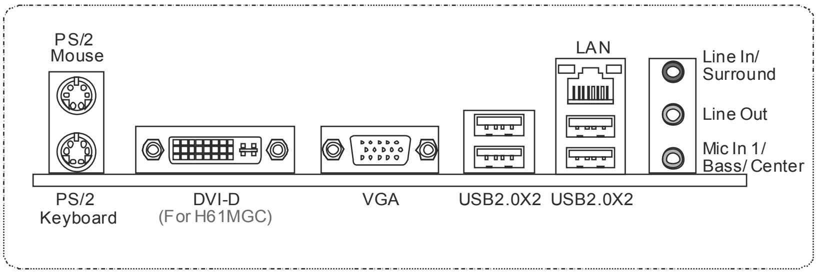
Note: The package contents may be different due to area or your motherboard version.

1.3 MOTHERBOARD FEATURES

	H61MGC	*H61MLC*
CPU	Socket 1155 Intel Core i7/i5/i3/Pentium/Celeron processor Supports Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1155 Intel Core i7/i5/i3/Pentium/Celeron processor Supports Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
Chipset	Intel H61	Intel H61
Super I/O	ITE 8728 Provides the most commonly used legacy Super I/O functionality. Low Pin Count Interface Environment Control initiatives, Hardware Monitor Controller Fan Speed Controller ITE's "Smart Guardian" function	ITE 8728 Provides the most commonly used legacy Super I/O functionality. Low Pin Count Interface Environment Control initiatives, Hardware Monitor Controller Fan Speed Controller ITE's "Smart Guardian" function
Main Memory	DIMM Slots x 2, Each DIMM supports 512MB / 1GB / 2GB / 4GB / 8GB DDR3 Max Memory Capacity 16GB Dual Channel Mode DDR3 memory module Supports DDR3 1066/1333/1600 (depending on CPU) Registered DIMM and ECC DIMM is not supported	DIMM Slots x 2, Each DIMM supports 512MB / 1GB / 2GB / 4GB / 8GB DDR3 Max Memory Capacity 16GB Dual Channel Mode DDR3 memory module Supports DDR3 1066/1333/1600 (depending on CPU) Registered DIMM and ECC DIMM is not supported
SATA 2	Integrated Serial ATA Controller Data transfer rates up to 3.0 Gb/s. SATA Version 2.0 specification compliant	Integrated Serial ATA Controller Data transfer rates up to 3.0 Gb/s. SATA Version 2.0 specification compliant
LAN	Realtek RTL8111E / RTL8111F Atheros AR8151 10 / 100 Mb/s / 1Gb/s auto negotiation	Realtek RTL8105E Atheros AR8152 10 / 100 Mb/s auto negotiation
Sound Codec	VT1708B / ALC662 5.1 channels audio out High Definition Audio	VT1708B / ALC662 5.1 channels audio out High Definition Audio
Slots	PCI-E Gen3x16 slot (depending on CPU) x1 PCI Express Gen2 x1 Slot x2	PCI-E Gen3x16 slot (depending on CPU) x1 PCI Express Gen2 x1 Slot x2

	H61MGC		H61MLC	
On Board Connectors	Printer Port Connector	x1	Printer Port Connector	x1
	Serial Port Connector	x1	Serial Port Connector	x1
	SATA Connector	x4	SATA Connector	x4
	Front Panel Connector	x1	Front Panel Connector	x1
	Front Audio Connector	x1	Front Audio Connector	x1
	CPU Fan Header	x1	CPU Fan Header	x1
	System Fan Header	x1	System Fan Header	x1
	Clear CMOS Header	x1	Clear CMOS Header	x1
	USB 2.0 Connector	x2	USB 2.0 Connector	x2
	Power Connector (24pin)	x1	Power Connector (24pin)	x1
	Power Connector (4pin)	x1	Power Connector (4pin)	x1
Back Panel I/O	PS/2 Keyboard	x1	PS/2 Keyboard	x1
	PS/2 Mouse	x1	PS/2 Mouse	x1
	VGA Port	x1	VGA Port	x1
	DVI-D Port	x1	LAN Port	x1
	LAN Port	x1	USB2.0 Port	x4
	USB2.0 Port	x4	Audio Jack	x3
	Audio Jack	x3		
Board Size	175 (W) x 226 (L) mm		175 (W) x 226 (L) mm	
OS Support	Windows XP / Vista / 7 Biostar reserves the right to add or remove support for any OS with or without notice		Windows XP / Vista / 7 Biostar reserves the right to add or remove support for any OS with or without notice	

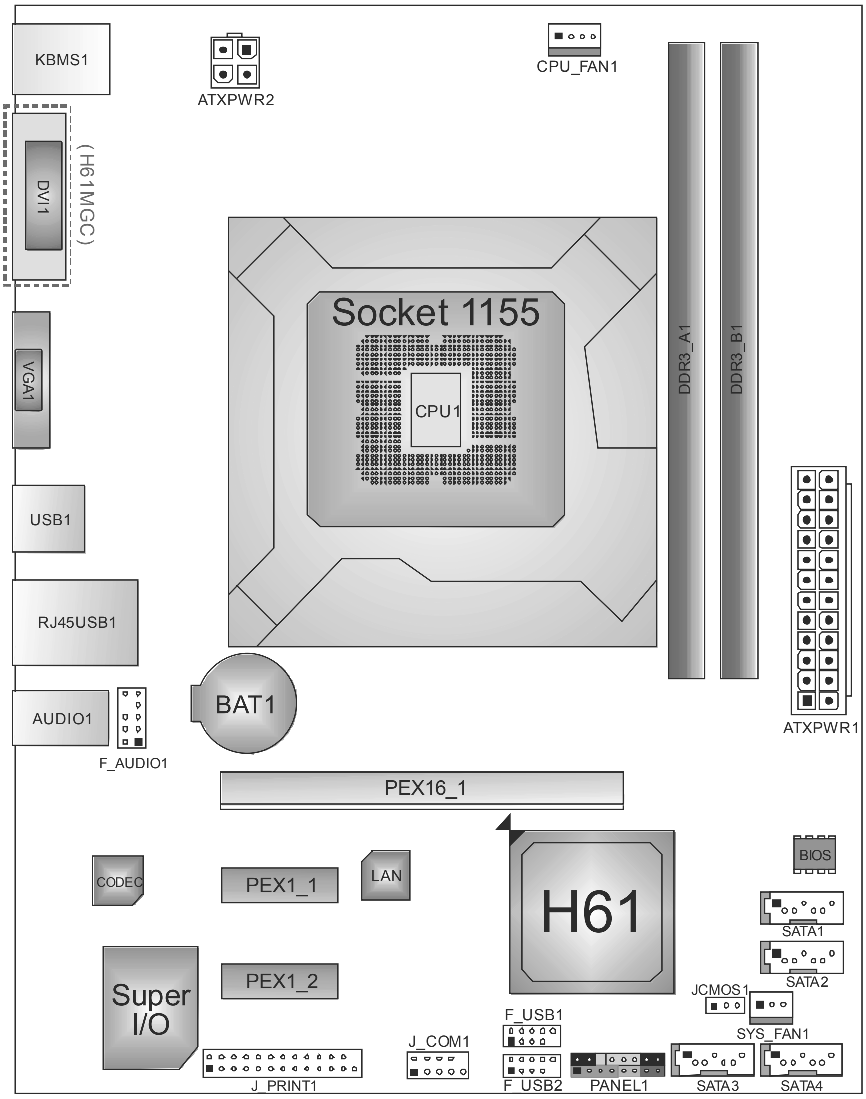
1.4 Rear Panel Connectors



NOTE: DVI-D / VGA Output require an Intel Core family processor with Intel Graphics Technology.

NOTE: **Maximum resolution:**
DVI: 1920 x 1200 @60Hz
VGA: 2048 x 1536 @75Hz

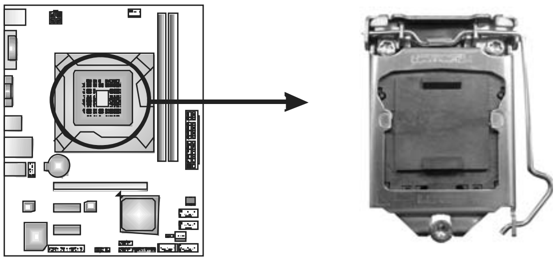
1.5 Motherboard Layout



Note: ■ represents the 1st pin.

CHAPTER 2: HARDWARE INSTALLATION

2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)

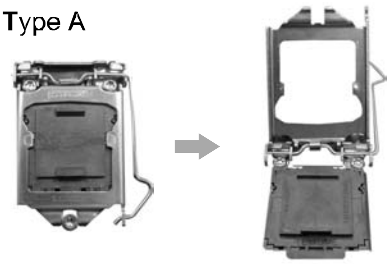


Notice:

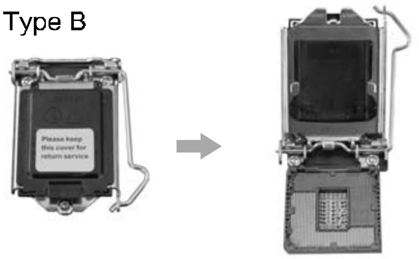
1. Remove Pin Cap before installation, and make good preservation for future use. When the CPU is removed, cover the Pin Cap on the empty socket to ensure pin legs won't be damaged.
2. The motherboard might equip with two different types of pin cap. Please refer below instruction to remove the pin cap.

Step 1: Pull the socket locking lever out from the socket then raise the lever and load plate to the fully open position.

Type A

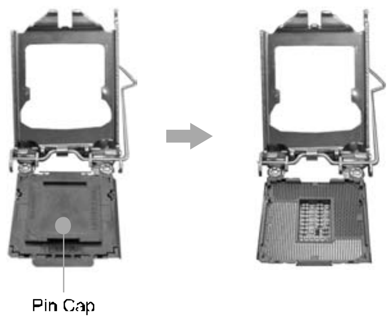


Type B

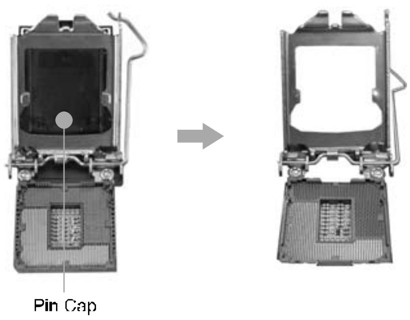


Step 2: Remove the Pin Cap.

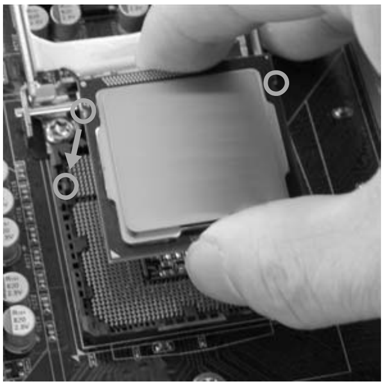
Type A



Type B



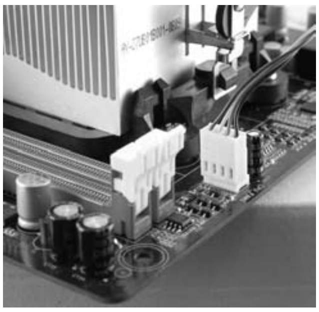
Step 3: Hold processor with your thumb and index fingers, oriented as shown. Align the notches with the socket. Lower the processor straight down without tilting or sliding the processor in the socket.



Step 4: Close the load plate. Pressing down on the load plate, close and engage the socket lever.



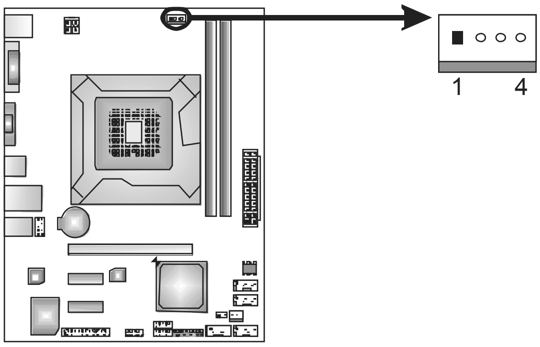
Step 5: Put the CPU Fan and heatsink assembly on the CPU and buckle it on the retention frame. Connect the CPU FAN power cable into the CPU_FAN1 to complete the installation.



2.2 FAN HEADERS

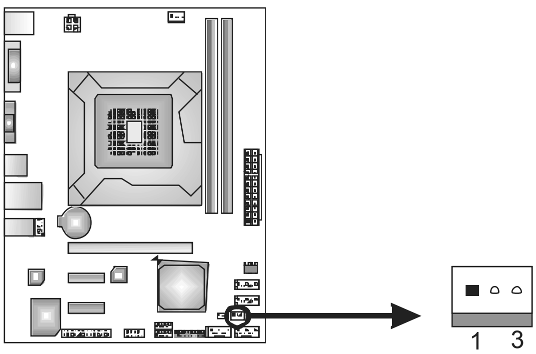
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different according to the fan manufacturer. Connect the fan cable to the connector while matching the black wire to pin#1.

CPU_FAN1: CPU Fan Header



Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense
4	Smart Fan Control

SYS_FAN1: System Fan Header



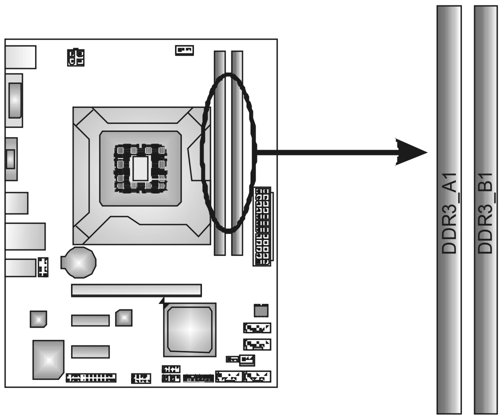
Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense

Note:

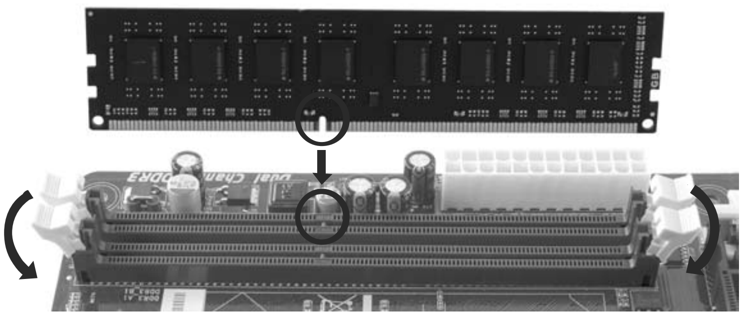
The SYS_FAN1 support 3-pin head connectors; the CPU_FAN1 supports 4-pin head connector. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

2.3 Installing System Memory

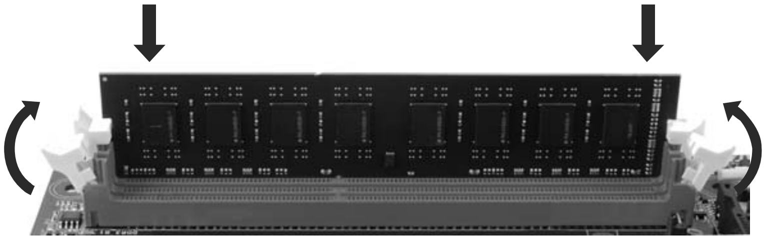
A. Memory Modules



1. Unlock a DIMM slot by pressing the retaining clips outward. Align a DIMM on the slot such that the notch on the DIMM matches the



2. Insert the DIMM vertically and firmly into the slot until the retaining chip snap back in place and the DIMM is properly seated.



Note:

If the DIMM does not go in smoothly, do not force it. Pull it all the way out and try again.

B. Memory Capacity

DIMM Socket Location	DDR3 Module	Total Memory Size
DDR3_A1	512MB/1GB/2GB/4GB/8GB	Max is 16GB.
DDR3_B1	512MB/1GB/2GB/4GB/8GB	

C. Dual Channel Memory Installation

Please refer to the following requirements to activate Dual Channel function:

Install memory module of the same density in pairs, shown in the table.

Dual Channel Status	DDR3_A1	DDR3_B1
Disabled	O	X
Disabled	X	O
Enabled	O	O

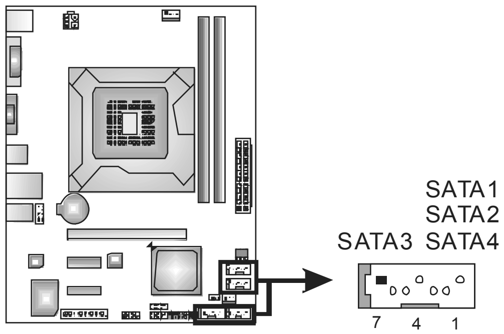
(O means memory installed; X, not installed.)

The DRAM bus width of the memory module must be the same(x8 or x16)

2.4 CONNECTORS AND SLOTS

SATA1~SATA4: Serial ATA Connectors

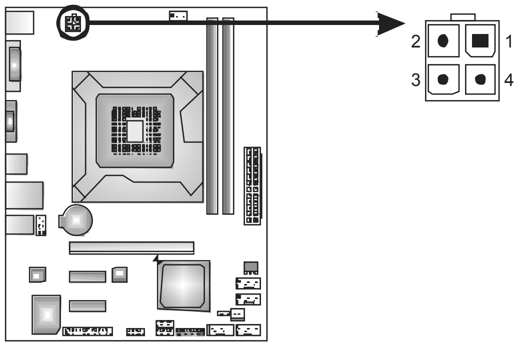
The motherboard has a PCI to SATA Controller with 4 channels SATA2 interface, it satisfies the SATA 2.0 spec and with transfer rate of 3.0Gb/s.



Pin	Assignment
1	Ground
2	TX+
3	TX-
4	Ground
5	RX-
6	RX+
7	Ground

ATXPWR2: ATX Power Source Connector

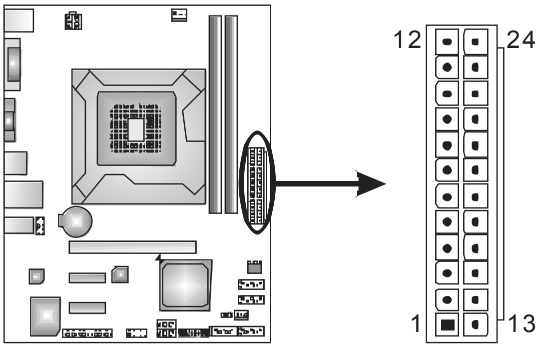
This connector provides +12V to CPU power circuit.



Pin	Assignment
1	+12V
2	+12V
3	Ground
4	Ground

ATXPWR1: ATX Power Source Connector

This connector allows user to connect 24-pin power connector on the ATX power supply.



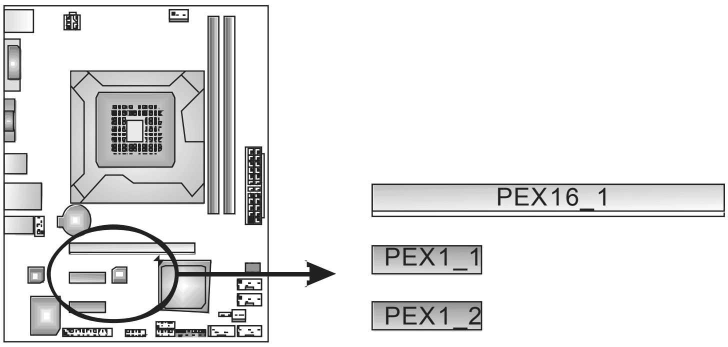
Pin	Assignment	Pin	Assignment
13	+3.3V	1	+3.3V
14	-12V	2	+3.3V
15	Ground	3	Ground
16	PS_ON	4	+5V
17	Ground	5	Ground
18	Ground	6	+5V
19	Ground	7	Ground
20	NC	8	PW_OK
21	+5V	9	Standby Voltage+5V
22	+5V	10	+12V
23	+5V	11	+12V
24	Ground	12	+3.3V

PEX16_1: PCI-Express Gen3 x16 Slot

- PCI-Express 3.0 compliant.
- Maximum theoretical realized bandwidth of 16GB/s simultaneously per direction, for an aggregate of 32GB/s totally.
- PCI-E 3.0 is supported by Core i7-3xxx / i5-3xxx CPU.

PEX1_1: PCI-Express Gen2 x1 Slot

- PCI-Express 2.0 compliant.
- Data transfer bandwidth up to 500MB/s per direction; 1GB/s in total.
- PCI-Express supports a raw bit-rate of 2.5Gb/s on the data pins.



CHAPTER 3: HEADERS & JUMPERS SETUP

3.1 HOW TO SETUP JUMPERS

The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is "close", if not, that means the jumper is "open".



Pin opened



Pin closed

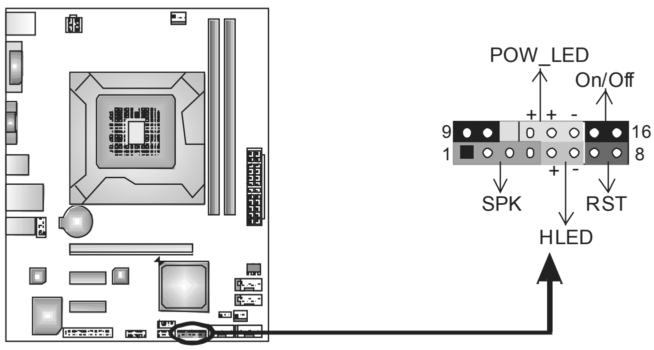


Pin1-2 closed

3.2 DETAIL SETTINGS

PANEL1: Front Panel Header

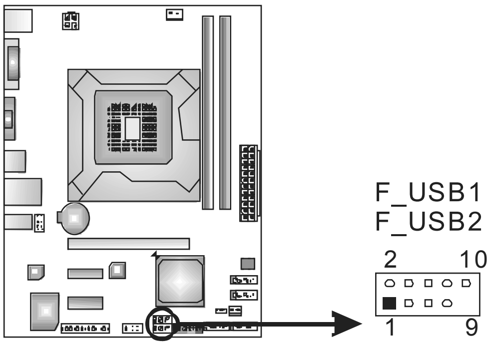
This 16-pin connector includes Power-on, Reset, HDD LED, Power LED, and speaker connection. It allows user to connect the PC case's front panel switch functions.



Pin	Assignment	Function	Pin	Assignment	Function
1	+5V	Speaker Connector	9	N/A	N/A
2	N/A		10	N/A	
3	N/A		11	N/A	N/A
4	Speaker		12	Power LED (+)	Power LED
5	HDD LED (+)	Hard drive LED	13	Power LED (+)	
6	HDD LED (-)		14	Power LED (-)	
7	Ground	Reset button	15	Power button	Power-on button
8	Reset control		16	Ground	

F_USB1/F_USB2: Headers for USB 2.0 Ports at Front Panel

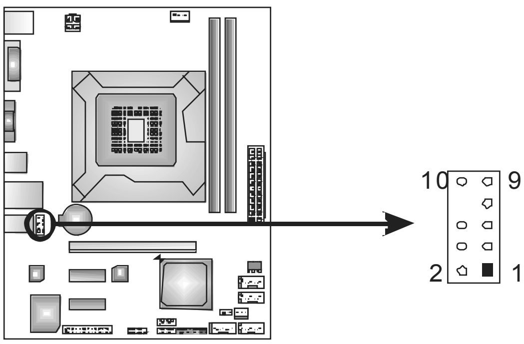
These headers allow user to connect additional USB cable on the PC front panel, and also can be connected with internal USB devices, like USB card reader.



Pin	Assignment
1	+5V (fused)
2	+5V (fused)
3	USB-
4	USB-
5	USB+
6	USB+
7	Ground
8	Ground
9	Key
10	NC

F_AUDIO1: Front Panel Audio Header

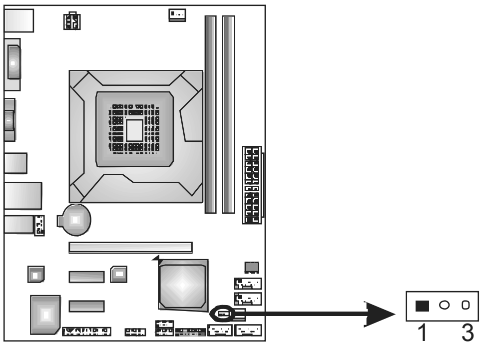
This header allows user to connect the front audio output cable with the PC front panel. This header allows only HD audio front panel connector; AC'97 connector is not acceptable.

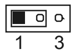


Pin	Assignment
1	Mic Left in
2	Ground
3	Mic Right in
4	GPIO
5	Right line in
6	Jack Sense
7	Front Sense
8	Key
9	Left line in
10	Jack Sense

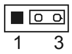
JCMOS1: Clear CMOS Header

Placing the jumper on pin2-3 allows user to restore the BIOS safe setting and the CMOS data. Please carefully follow the procedures to avoid damaging the motherboard.





Pin 1-2 Close:
Normal Operation (default).



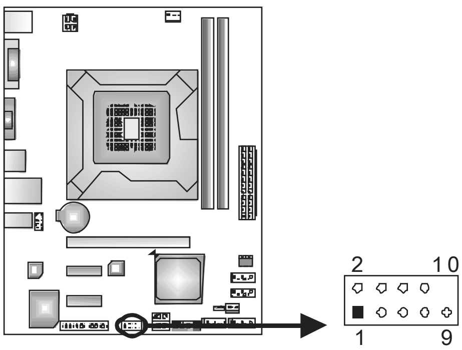
Pin 2-3 Close:
Clear CMOS data.

※ Clear CMOS Procedures:

1. Remove AC power line.
2. Set the jumper to “Pin 2-3 close”.
3. Wait for five seconds.
4. Set the jumper to “Pin 1-2 close”.
5. Power on the AC.
6. Load Optimal Defaults and save settings in CMOS.

J_COM1: Serial Port Connector

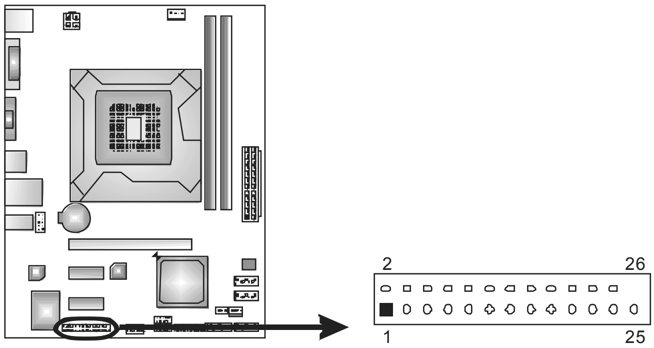
The motherboard has a Serial Port Connector for connecting RS-232 Port.



Pin	Assignment
1	Carrier detect
2	Received data
3	Transmitted data
4	Data terminal ready
5	Signal ground
6	Data set ready
7	Request to send
8	Clear to send
9	Ring indicator
10	NC

J_PRINT1: Printer Port Connector

This header allows you to connector printer on the PC.



Pin	Assignment	Pin	Assignment
1	-Strobe	14	Ground
2	-ALF	15	Data 6
3	Data 0	16	Ground
4	-Error	17	Data 7
5	Data 1	18	Ground
6	-Init	19	-ACK
7	Data 2	20	Ground
8	-Scltin	21	Busy
9	Data 3	22	Ground
10	Ground	23	PE
11	Data 4	24	Ground
12	Ground	25	SCLT
13	Data 5	26	Key

CHAPTER 4: USEFUL HELP

4.1 Driver Installation Note

After you installed your operating system, please insert the Fully Setup Driver DVD into your optical drive and install the driver for better system performance.

You will see the following window after you insert the DVD



The setup guide will auto detect your motherboard and operating system.

> ***Note:***
> If this window didn't show up after you insert the Driver DVD, please use file browser to locate and execute the file ***SETUP.EXE*** under your optical drive.

A. Driver Installation

To install the driver, please click on the Driver icon. The setup guide will list the compatible driver for your motherboard and operating system. Click on each device driver to launch the installation program.

B. Software Installation

To install the software, please click on the Software icon. The setup guide will list the software available for your system, click on each software title to launch the installation program.

C. Manual

Aside from the paperback manual, we also provide manual in the Driver DVD. Click on the Manual icon to browse for available manual.

> ***Note:***
> You will need Acrobat Reader to open the manual file. Please download the latest version of Acrobat Reader software from
> ***http://www.adobe.com/products/acrobat/readstep2.html***

4.2 SOFTWARE

Installing Software

1. Insert the Setup DVD to the optical drive. The drivers installation program would appear if the Autorun function has been enabled.
2. Select **Software Installation**, and then click on the respective software title.
3. Follow the on-screen instructions to complete the installation.

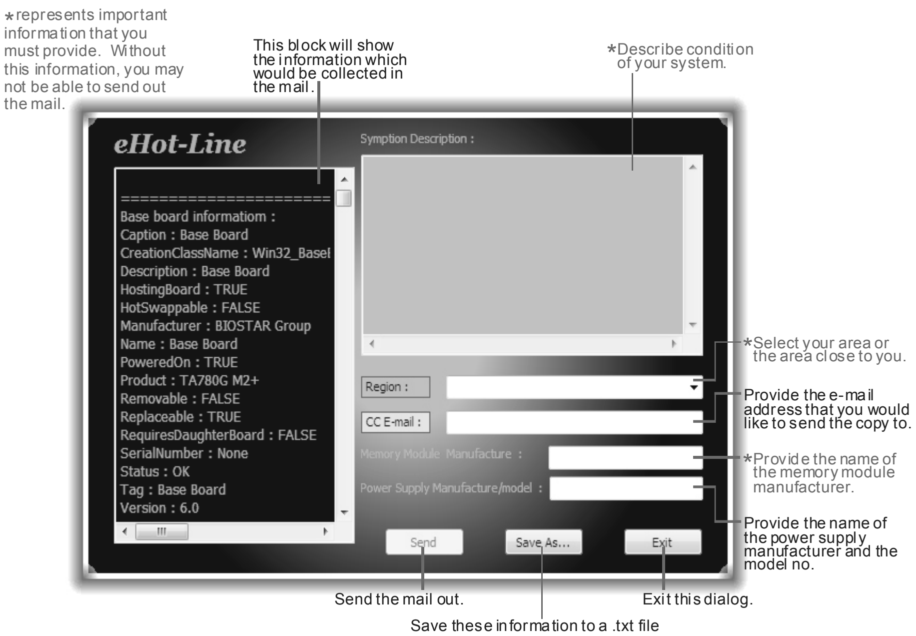
Launching Software

After the installation process, you will see the software icon “eHOT Line” / “BIOS Update” appears on the desktop. Double-click the icon to launch the utility.

eHot-Line (Optional)

eHot-Line is a convenient utility that helps you to contact with our Tech-Support system. This utility will collect the system information which is useful for analyzing the problem you may have encountered, and then send these information to our tech-support department to help you fix the problem.

Before you use this utility, please set Outlook Express as your default e-mail client application program.

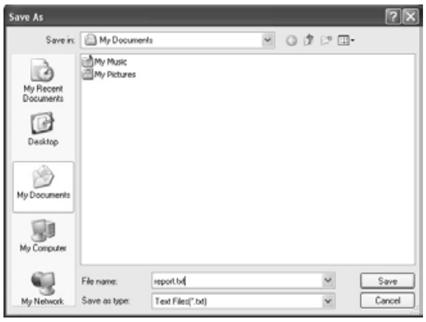


After filling up this information, click “**Send**” to send the mail out. A warning dialog would appear asking for your confirmation; click “**Send**” to confirm or “**Do Not Send**” to cancel.



If you want to save this information to a .txt file, click “**Save As…**” and then you will see a saving dialog appears asking you to enter file name.

Enter the file name and then click “**Save**”. Your system information will be saved to a .txt file.





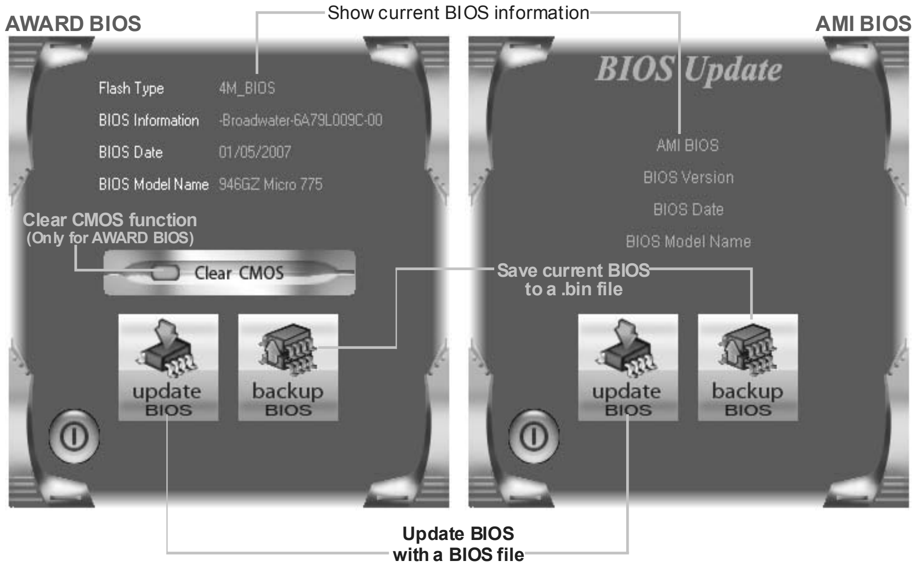
Open the saved .txt file, you will see your system information including motherboard/BIOS/CPU/video/ device/OS information. This information is also concluded in the sent mail.

We will not share customer’s data with any other third parties, so please feel free to provide your system information while using eHot-Line service.

If you are not using Outlook Express as your default e-mail client application, you may need to save the system information to a .txt file and send the file to our tech support with other e-mail application. Go to the following web http://www.biostar.com.tw/app/en-us/about/contact.php for getting our contact information.

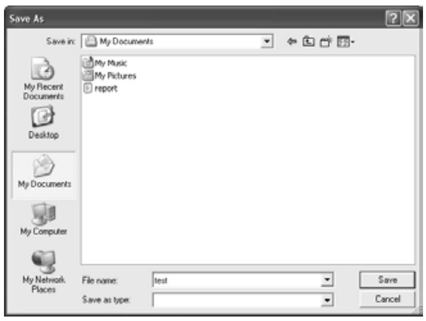
BIOS Update

BIOS Update is a convenient utility which allows you to update your motherboard BIOS under Windows system.



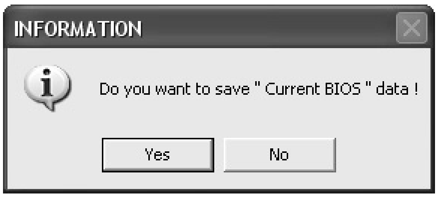
<Backup BIOS>

Once click on this button, the saving dialog will show. Choose the position to save file and enter file name. (We recommend that the file name should be English/number and no longer than 7 characters.) Then click **Save**.



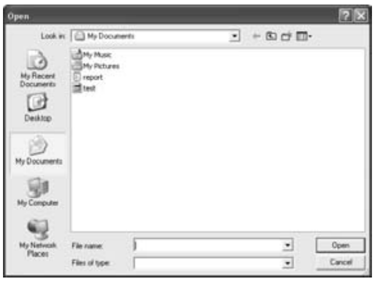
<Update BIOS>

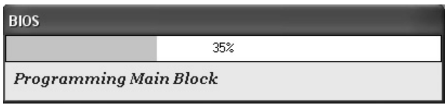
Before doing this, please download the proper BIOS file from the website.



Click Update BIOS button, a dialog will show for asking you backup current BIOS. Click **Yes** for BIOS backup and refer to the Backup BIOS procedure; or click **No** to skip this procedure.

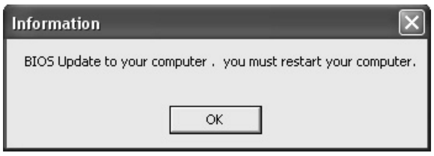
After the BIOS Backup procedure, the open dialog will show for requesting the BIOS file which is going to be updated. Please choose the proper BIOS file for updating, then click on **Open**.





The utility will update BIOS with the proper BIOS file, and this process may take minutes. Please do not open any other applications during this process.

After the BIOS Update process, click on **OK** to restart the system.



While the system boots up and the full screen logo shows, press  <Delete> key to enter BIOS setup.

In the BIOS setup, use the **Load Optimized Defaults** function and then **Save and Exit Setup** to exit BIOS setup. BIOS Update is completed.



All the information and content above about the software are subject to be changed without notice. For better performance, the software is being continuously updated. The information and pictures described above are for your reference only. The actual information and settings on board may be slightly different from this manual.

4.3 EXTRA INFORMATION

CPU Overheated

If the system shuts down automatically after system is powered on for seconds, the phenomenon means the CPU protection function has been activated.

When the CPU is over heated, the motherboard will shutdown automatically to avoid a damage of the CPU, and the system may not power on again.

In this case, please double check:

1. The CPU cooler surface is placed evenly with the CPU surface.
2. CPU fan is rotated normally.
3. CPU fan speed is fulfilling with the CPU speed.

After confirmed, please follow steps below to relief the CPU protection function.

1. Remove the power cord from power supply for seconds.
2. Wait for seconds.
3. Plug in the power cord and boot up the system.

Or you can:

1. Clear the CMOS data.
   (See “Close CMOS Header: JCMOS1” section)
2. Wait for seconds.
3. Power on the system again.

4.4 AMI BIOS BEEP CODE

Boot Block Beep Codes

Number of Beeps	Description
1	No media present. (Insert diskette in floppy drive A:)
2	"AMIBOOT.ROM" file not found in root directory of diskette in A:
3	Insert next diskette if multiple diskettes are used for recovery
4	Flash Programming successful
5	File read error
7	No Flash EPROM detected
10	Flash Erase error
11	Flash Program error
12	"AMIBOOT.ROM" file size error
13	BIOS ROM image mismatch (file layout does not match image present in flash device)

POST BIOS Beep Codes

Number of Beeps	Description
1	Memory refresh timer error
3	Base memory read/write test error
6	Keyboard controller BAT command failed
7	General exception error (processor exception interrupt error)
8	Display memory error (system video adapter)

Troubleshooting POST BIOS Beep Codes

Number of Beeps	Troubleshooting Action
1, 3	Reseat the memory, or replace with known good modules.
6, 7	Fatal error indicating a serious problem with the system. Consult your system manufacturer. Before declaring the motherboard beyond all hope, eliminate the possibility of interference by a malfunctioning add-in card. Remove all expansion cards except the video adapter. ● If beep codes are generated when all other expansion cards are absent, consult your system manufacturer's technical support. ● If beep codes are not generated when all other expansion cards are absent, one of the add-in cards is causing the malfunction. Insert the cards back into the system one at a time until the problem happens again. This will reveal the malfunctioning card.
8	If the system video adapter is an add-in card, replace or reseat the video adapter. If the video adapter is an integrated part of the system board, the board may be faulty.

4.5 TROUBLESHOOTING

Probable	Solution
1. There is no power in the system. Power LED does not shine; the fan of the power supply does not work 2. Indicator light on keyboard does not shine.	1. Make sure power cable is securely plugged in. 2. Replace cable. 3. Contact technical support.
System is inoperative. Keyboard lights are on, power indicator lights are lit, and hard drives are running.	Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.
System does not boot from a hard disk drive, but can be booted from optical drive.	1. Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup. 2. Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.
System only boots from an optical drive. Hard disks can be read, applications can be used, but system fails to boot from a hard disk.	1. Back up data and applications files. 2. Reformat the hard drive. Re-install applications and data using backup disks.
Screen message shows "Invalid Configuration" or "CMOS Failure."	Review system's equipment. Make sure correct information is in setup.
System cannot boot after user installs a second hard drive.	1. Set master/slave jumpers correctly. 2. Run SETUP program and select correct drive types. Call the drive manufacturers for compatibility with other drives.

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APPENDIX: SPEC IN OTHER LANGUAGES

GERMAN

	H61MGC	H61MLC
CPU	Socket 1155 Intel Core i7/i5/i3/Pentium/Celeron Prozessoren Unterstützt Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1155 Intel Core i7/i5/i3/Pentium/Celeron Prozessoren Unterstützt Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
Chipsatz	Intel H61	Intel H61
Super E/A	ITE 8728 Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Count-Schnittstelle Umgebungskontrolle, Hardware-Überwachung Lüfterdrehzahl-Controller/-Überwachung "Smart Guardian"-Funktion von ITE	ITE 8728 Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Count-Schnittstelle Umgebungskontrolle, Hardware-Überwachung Lüfterdrehzahl-Controller/-Überwachung "Smart Guardian"-Funktion von ITE
Arbeitsspeicher	DDR3 DIMM-Steckplätze x 2 Jeder DIMM unterstützt 512MB / 1GB / 2GB / 4GB / 8GB DDR3. Max. 16GB Arbeitsspeicher Dual-Kanal DDR3 Speichermodul Unterstützt DDR3 1600/1333/1066 registrierte DIMMs. ECC DIMMs werden nicht unterstützt.	DDR3 DIMM-Steckplätze x 2 Jeder DIMM unterstützt 512MB / 1GB / 2GB / 4GB / 8GB DDR3. Max. 16GB Arbeitsspeicher Dual-Kanal DDR3 Speichermodul Unterstützt DDR3 1600/1333/1066 registrierte DIMMs. ECC DIMMs werden nicht unterstützt.
SATA 2	Integrierter Serial ATA-Controller Datentransferrate bis zu 3.0Gb/s Konform mit der SATA-Spezifikation Version 2.0.	Integrierter Serial ATA-Controller Datentransferrate bis zu 3.0Gb/s Konform mit der SATA-Spezifikation Version 2.0.
LAN	Realtek RTL8111E / RTL8111F Atheros AR8151 10 / 100 / 1000 Mb/s Auto-Negotiation	Realtek RTL8105E Atheros AR8152 10 / 100 Mb/s Auto-Negotiation
HD Audio-Unterstützung	VT1708B / ALC662 Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe	VT1708B / ALC662 Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe
Steckplätze	PCI Express Gen3 x16 Steckplatz (je nach CPU) x1	PCI Express Gen3 x16 Steckplatz (je nach CPU) x1

	H61MGC		H61MLC	
	PCI Express Gen2 x1 Steckplatz	x2	PCI Express Gen2 x1 Steckplatz	x2
Onboard-Anschluss	Druckeranschluss Anschluss	x1	Druckeranschluss Anschluss	x1
	Serieller Anschluss	x1	Serieller Anschluss	x1
	SATA-Anschluss	x4	SATA-Anschluss	x4
	Fronttafelanschluss	x1	Fronttafelanschluss	x1
	Front-Audioanschluss	x1	Front-Audioanschluss	x1
	CPU-Lüfter-Sockel	x1	CPU-Lüfter-Sockel	x1
	System-Lüfter-Sockel	x1	System-Lüfter-Sockel	x1
	"CMOS löschen"-Sockel	x1	"CMOS löschen"-Sockel	x1
	USB 2.0-Anschluss	x2	USB 2.0-Anschluss	x2
	Stromanschluss (24-polig)	x1	Stromanschluss (24-polig)	x1
	Stromanschluss (4-polig)	x1	Stromanschluss (4-polig)	x1
Rückseiten-E/A	PS/2-Tastatur	x1	PS/2-Tastatur	x1
	PS/2-Maus	x1	PS/2-Maus	x1
	VGA-Anschluss	x1	VGA-Anschluss	x1
	DVI-D-Anschluss	x1	LAN-Anschluss	x1
	LAN-Anschluss	x1	USB 2.0-Anschluss	x4
	USB 2.0-Anschluss	x4	Audioanschluss	x3
	Audioanschluss	x3		
Platinengröße	175mm (B) X 226 mm (L)		175mm (B) X 226 mm (L)	
OS-Unterstützung	Windows XP / Vista / 7 Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.		Windows XP / Vista / 7 Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.	

FRENCH

	H61MGC	*H61MLC*
UC	Socket 1155 Processeurs Intel Core i7/i5/i3/Pentium/Celeron Prend en charge les technologies d'exécution de bit de désactivation / Intel SpeedStep® optimisée/ d'architecture Intel 64 / de mémoire étendue 64 / de virtualisation	Socket 1155 Processeurs Intel Core i7/i5/i3/Pentium/Celeron Prend en charge les technologies d'exécution de bit de désactivation / Intel SpeedStep® optimisée/ d'architecture Intel 64 / de mémoire étendue 64 / de virtualisation
Chipset	Intel H61	Intel H61
Super E/S	ITE 8728 Fournit la fonctionnalité de Super E/S patrimoniales la plus utilisée. Interface à faible compte de broches Initiatives de contrôle environnementales, Moniteur de matériel Contrôleur /moniteur de vitesse de ventilateur Fonction "Gardien intelligent" de l'ITE	ITE 8728 Fournit la fonctionnalité de Super E/S patrimoniales la plus utilisée. Interface à faible compte de broches Initiatives de contrôle environnementales, Moniteur de matériel Contrôleur /moniteur de vitesse de ventilateur Fonction "Gardien intelligent" de l'ITE
Mémoire principale	Fentes DDR3 DIMM x 2 Chaque DIMM prend en charge des DDR3 de 512Mo / 1Go / 2Go / 4Go / 8Go Capacité mémoire maximale de 16Go Module de mémoire DDR3 à mode à double voie Prend en charge la DDR3 1600/1333/1066 Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge	Fentes DDR3 DIMM x 2 Chaque DIMM prend en charge des DDR3 de 512Mo / 1Go / 2Go / 4Go / 8Go Capacité mémoire maximale de 16Go Module de mémoire DDR3 à mode à double voie Prend en charge la DDR3 1600/1333/1066 Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge
SATA 2	Contrôleur Serial ATA intégré Taux de transfert jusqu'à 3.0Go/s. Conforme à la spécification SATA Version 2.0	Contrôleur Serial ATA intégré Taux de transfert jusqu'à 3.0Go/s. Conforme à la spécification SATA Version 2.0
LAN	Realtek RTL8111E / RTL8111F Atheros AR8151 10 / 100 / 1000 Mb/s négociation automatique	Realtek RTL8105E Atheros AR8152 10 / 100 Mb/s négociation automatique
Prise en charge audio HD	VT1708B / ALC662 Prise en charge de l'audio haute définition Sortie audio à 5.1 voies	VT1708B / ALC662 Prise en charge de l'audio haute définition Sortie audio à 5.1 voies
Fentes	Fente PCI Express Gen2 x16 (en fonction du CPU) x1	Fente PCI Express Gen2 x16 (en fonction du CPU) x1

	H61MGC		H61MLC	
	Fente PCI Express Gen2 x1	x2	Fente PCI Express Gen2 x1	x2
Connecteur embarqué	Connecteur de Port d'imprimante	x1	Connecteur de Port d'imprimante	x1
	Port série	x1	Port série	x1
	Connecteur SATA	x4	Connecteur SATA	x4
	Connecteur du panneau avant	x1	Connecteur du panneau avant	x1
	Connecteur Audio du panneau avant	x1	Connecteur Audio du panneau avant	x1
	Embase de ventilateur UC	x1	Embase de ventilateur UC	x1
	Embase de ventilateur système	x1	Embase de ventilateur système	x1
	Embase d'effacement CMOS	x1	Embase d'effacement CMOS	x1
	Connecteur USB 2.0	x2	Connecteur USB 2.0	x2
	Connecteur d'alimentation (24 broches)	x1	Connecteur d'alimentation (24 broches)	x1
	Connecteur d'alimentation (4 broches)	x1	Connecteur d'alimentation (4 broches)	x1
E/S du panneau arrière	Clavier PS/2	x1	Clavier PS/2	x1
	Souris PS/2	x1	Souris PS/2	x1
	Port VGA	x1	Port VGA	x1
	Port DVI-D	x1	Port LAN	x1
	Port LAN	x1	Port USB 2.0	x4
	Port USB 2.0	x4	Fiche audio	x3
	Fiche audio	x3		
Dimensions de la carte	175mm (l) X 226 mm (H)		175mm (l) X 226 mm (H)	
Support SE	Windows XP / Vista / 7 Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.		Windows XP / Vista / 7 Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.	

ITALIAN

	H61MGC	*H61MLC*
CPU	Socket 1155 Processore Intel Core i7/i5/i3/Pentium/Celeron Supporto di Execute Disable Bit / Enhanced Intel SpeedStep® / Architettura Intel 64 / Tecnologia Extended Memory 64 / Tecnologia Virtualization	Socket 1155 Processore Intel Core i7/i5/i3/Pentium/Celeron Supporto di Execute Disable Bit / Enhanced Intel SpeedStep® / Architettura Intel 64 / Tecnologia Extended Memory 64 / Tecnologia Virtualization
Chipset	Intel H61	Intel H61
Super I/O	ITE 8728 Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count) Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller / Monitoraggio velocità ventolina Funzione "Smart Guardian" di ITE	ITE 8728 Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count) Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller / Monitoraggio velocità ventolina Funzione "Smart Guardian" di ITE
Memoria principale	Alloggi DIMM DDR3 x 2 Ciascun DIMM supporta DDR3 512MB / 1GB / 2GB / 4GB / 8GB Capacità massima della memoria 16GB Modulo di memoria DDR3 a canale doppio Supporto di DDR3 1600/1333/1066 DIMM registrati e DIMM ECC non sono supportati	Alloggi DIMM DDR3 x 2 Ciascun DIMM supporta DDR3 512MB / 1GB / 2GB / 4GB / 8GB Capacità massima della memoria 16GB Modulo di memoria DDR3 a canale doppio Supporto di DDR3 1600/1333/1066 DIMM registrati e DIMM ECC non sono supportati
SATA 2	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3.0Gb/s. Compatibile specifiche SATA Versione 2.0.	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3.0Gb/s. Compatibile specifiche SATA Versione 2.0.
LAN	Realtek RTL8111E / RTL8111F Atheros AR8151 Negoziazione automatica 10 / 100 / 1000Mb/s	Realtek RTL8105E Atheros AR8152 Negoziazione automatica 10 / 100Mb/s
Supporto audio HD	VT1708B / ALC662 Supporto audio High-Definition (HD) Uscita audio 5.1 canali	VT1708B / ALC662 Supporto audio High-Definition (HD) Uscita audio 5.1 canali
Alloggi	Alloggio PCI Express Gen3 x16 (a seconda del CPU) x1	Alloggio PCI Express Gen3 x16 (a seconda del CPU) x1

	H61MGC		H61MLC	
	Alloggio PCI Express Gen2 x1	x2	Alloggio PCI Express Gen2 x1	x2
Connettori su scheda	Connettore Porta stampante	x1	Connettore Porta stampante	x1
	Porta seriale	x1	Porta seriale	x1
	Connettore SATA	x4	Connettore SATA	x4
	Connettore pannello frontale	x1	Connettore pannello frontale	x1
	Connettore audio frontale	x1	Connettore audio frontale	x1
	Collettore ventolina CPU	x1	Collettore ventolina CPU	x1
	Collettore ventolina sistema	x1	Collettore ventolina sistema	x1
	Collettore cancellazione CMOS	x1	Collettore cancellazione CMOS	x1
	Connettore USB 2.0	x2	Connettore USB 2.0	x2
	Connettore alimentazione (24 pin)	x1	Connettore alimentazione (24 pin)	x1
	Connettore alimentazione (4 pin)	x1	Connettore alimentazione (4 pin)	x1
I/O pannello posteriore	Tastiera PS/2	x1	Tastiera PS/2	x1
	Mouse PS/2	x1	Mouse PS/2	x1
	Porta VGA	x1	Porta VGA	x1
	Porta DVI-D	x1	Porta LAN	x1
	Porta LAN	x1	Porta USB 2.0	x4
	Porta USB 2.0	x4	Connettore audio	x3
	Connettore audio	x3		
Dimensioni scheda	175mm (larghezza) x 226 mm (altezza)		175mm (larghezza) x 226 mm (altezza)	
Sistemi operativi supportati	Windows XP / Vista / 7 Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.		Windows XP / Vista / 7 Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.	

SPANISH

	H61MGC	H61MLC
CPU	Socket 1155 Procesador Intel Core i7/i5/i3/Pentium/Celeron Admite Bit de deshabilitación de ejecución / Intel SpeedStep® Mejorado / Intel Architecture-64 / Tecnología Extended Memory 64 / Tecnología de virtualización	Socket 1155 Procesador Intel Core i7/i5/i3/Pentium/Celeron Admite Bit de deshabilitación de ejecución / Intel SpeedStep® Mejorado / Intel Architecture-64 / Tecnología Extended Memory 64 / Tecnología de virtualización
Conjunto de chips	Intel H61	Intel H61
Súper E/S	ITE 8728 Le ofrece las funcionalidades heredadas de uso más común Súper E/S. Interfaz de cuenta Low Pin Iniciativas de control de entorno, Monitor hardware Controlador/monitor de velocidad de ventilador Función "Guardia inteligente" de ITE	ITE 8728 Le ofrece las funcionalidades heredadas de uso más común Súper E/S. Interfaz de cuenta Low Pin Iniciativas de control de entorno, Monitor hardware Controlador/monitor de velocidad de ventilador Función "Guardia inteligente" de ITE
Memoria principal	Ranuras DIMM DDR3 x 2 Cada DIMM admite DDR de 512MB / 1GB / 2GB / 4GB / 8GB Capacidad máxima de memoria de 16GB Módulo de memoria DDR3 de canal Doble Admite DDR3 de 1600/1333/1066 No admite DIMM registrados o DIMM compatibles con ECC	Ranuras DIMM DDR3 x 2 Cada DIMM admite DDR de 512MB / 1GB / 2GB / 4GB / 8GB Capacidad máxima de memoria de 16GB Módulo de memoria DDR3 de canal Doble Admite DDR3 de 1600/1333/1066 No admite DIMM registrados o DIMM compatibles con ECC
SATA 2	Controlador ATA Serie Integrado Tasas de transferencia de hasta 3.0 Gb/s. Compatible con la versión SATA 2.0.	Controlador ATA Serie Integrado Tasas de transferencia de hasta 3.0 Gb/s. Compatible con la versión SATA 2.0.
Red Local	Realtek RTL8111E / RTL8111F Atheros AR8151 Negociación de 10 / 100 / 1000 Mb/s	Realtek RTL8105E Atheros AR8152 Negociación de 10 / 100 Mb/s
Soporte de sonido HD	VT1708B / ALC662 Soporte de sonido de Alta Definición Salida de sonido de 5.1 canales	VT1708B / ALC662 Soporte de sonido de Alta Definición Salida de sonido de 5.1 canales
Ranuras	Ranura PCI Express Gen3 x16 (dependiendo de la CPU) X1	Ranura PCI Express Gen3 x16 (dependiendo de la CPU) X1

	H61MGC		H61MLC	
	Ranura PCI express Gen2 x1	X2	Ranura PCI express Gen2 x1	X2
Conectores en placa	Conector Puerto de impresora	X1	Conector Puerto de impresora	X1
	Puerto serie	X1	Puerto serie	X1
	Conector SATA	X4	Conector SATA	X4
	Conector de panel frontal	X1	Conector de panel frontal	X1
	Conector de sonido frontal	X1	Conector de sonido frontal	X1
	Cabecera de ventilador de CPU	X1	Cabecera de ventilador de CPU	X1
	Cabecera de ventilador de sistema	X1	Cabecera de ventilador de sistema	X1
	Cabecera de borrado de CMOS	X1	Cabecera de borrado de CMOS	X1
	Conector USB 2.0	X2	Conector USB 2.0	X2
	Conector de alimentación (24 patillas)	X1	Conector de alimentación (24 patillas)	X1
	Conector de alimentación (4 patillas)	X1	Conector de alimentación (4 patillas)	X1
Panel trasero de E/S	Teclado PS/2	X1	Teclado PS/2	X1
	Ratón PS/2	X1	Ratón PS/2	X1
	Puerto VGA	X1	Puerto VGA	X1
	Puerto DVI-D	X1	Puerto de red local	X1
	Puerto de red local	X1	Puerto USB 2.0	X4
	Puerto USB 2.0	X4	Conector de sonido	X3
	Conector de sonido	X3		
Tamaño de la placa	175mm. (A) X 226 Mm. (H)		175mm. (A) X 226 Mm. (H)	
Soporte de sistema operativo	Windows XP / Vista / 7 Biostar se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.		Windows XP / Vista / 7 Biostar se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.	

PORTUGUESE

	H61MGC	H61MLC
CPU	Socket 1155 Processador Intel Core i7/i5/i3/Pentium/Celeron Suporta as tecnologias Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Arquitecture -64 / Extended Memory 64 / Virtualization	Socket 1155 Processador Intel Core i7/i5/i3/Pentium/Celeron Suporta as tecnologias Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Arquitecture -64 / Extended Memory 64 / Virtualization
Chipset	Intel H61	Intel H61
Especificação Super I/O	ITE 8728 Proporciona as funcionalidades mais utilizadas em termos da especificação Super I/O. Interface LPC (Low Pin Count). Iniciativas para controlo do ambiente Monitorização do hardware Controlador/Monitor da velocidade da ventoinha Função "Smart Guardian" da ITE	ITE 8728 Proporciona as funcionalidades mais utilizadas em termos da especificação Super I/O. Interface LPC (Low Pin Count). Iniciativas para controlo do ambiente Monitorização do hardware Controlador/Monitor da velocidade da ventoinha Função "Smart Guardian" da ITE
Memória principal	Ranhuras DIMM DDR3 x 2 Cada módulo DIMM suporta uma memória DDR3 de 512 MB / 1GB / 2GB / 4GB / 8GB Capacidade máxima de memória:16GB Módulo de memória DDR3 de canal duplo Suporta módulos DDR3 1600/1333/1066 Os módulos DIMM registados e os DIMM ECC não são suportados	Ranhuras DIMM DDR3 x 2 Cada módulo DIMM suporta uma memória DDR3 de 512 MB / 1GB / 2GB / 4GB / 8GB Capacidade máxima de memória:16GB Módulo de memória DDR3 de canal duplo Suporta módulos DDR3 1600/1333/1066 Os módulos DIMM registados e os DIMM ECC não são suportados
SATA 2	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3.0 Gb/s. Compatibilidade com a especificação SATA versão 2.0.	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3.0 Gb/s. Compatibilidade com a especificação SATA versão 2.0.
LAN	Realtek RTL8111E / RTL8111F Atheros AR8151 Auto negociação de 10 / 100 / 1000 Mb/s	Realtek RTL8105E Atheros AR8152 Auto negociação de 10 / 100 Mb/s
Suporte para áudio de alta definição	VT1708B / ALC662 Suporta a especificação High-Definition Audio Saída de áudio de 5.1 canais	VT1708B / ALC662 Suporta a especificação High-Definition Audio Saída de áudio de 5.1 canais
Ranhuras	Ranhura PCI Express Gen3 x16 (dependendo da CPU) x1	Ranhura PCI Express Gen3 x16 (dependendo da CPU) x1

	H61MGC		H61MLC	
	Ranhura PCI Express Gen2 x1	x2	Ranhura PCI Express Gen2 x1	x2
Conectores na placa	Conector da para impressora	x1	Conector da para impressora	x1
	Porta série	x1	Porta série	x1
	Conector SATA	x4	Conector SATA	x4
	Conector do painel frontal	x1	Conector do painel frontal	x1
	Conector de áudio frontal	x1	Conector de áudio frontal	x1
	Conector da ventoinha da CPU	x1	Conector da ventoinha da CPU	x1
	Conector da ventoinha do sistema	x1	Conector da ventoinha do sistema	x1
	Conector para limpeza do CMOS	x1	Conector para limpeza do CMOS	x1
	Conector USB 2.0	x2	Conector USB 2.0	x2
	Conector de alimentação (24 pinos)	x1	Conector de alimentação (24 pinos)	x1
	Conector de alimentação (4 pinos)	x1	Conector de alimentação (4 pinos)	x1
Entradas/Saídas no painel traseiro	Teclado PS/2	x1	Teclado PS/2	x1
	Rato PS/2	x1	Rato PS/2	x1
	Porta VGA	x1	Porta VGA	x1
	Porta DVI-D	x1	Porta LAN	x1
	Porta LAN	x1	Porta USB 2.0	x4
	Porta USB 2.0	x4	Tomada de áudio	x3
	Tomada de áudio	x3		
Tamanho da placa	175mm (L) X 226 mm (A)		175mm (L) X 226 mm (A)	
Sistemas operativos suportados	Windows XP / Vista / 7 A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio.		Windows XP / Vista / 7 A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio.	

POLISH

	H61MGC	H61MLC
Procesor	Socket 1155 Procesor Intel Core i7/i5/i3/Pentium/Celeron Obsługa Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1155 Procesor Intel Core i7/i5/i3/Pentium/Celeron Obsługa Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
Chipset	Intel H61	Intel H61
Pamięć główna	Gniazda DDR3 DIMM x 2 Każde gniazdo DIMM obsługuje moduły 512MB / 1GB / 2GB / 4GB / 8GB Maks. wielkość pamięci 16GB Moduł pamięci DDR3 z trybem podwójnego kanału Obsługa DDR3 1600/1333/1066 Brak obsługi Registered DIMM oraz ECC DIMM	Gniazda DDR3 DIMM x 2 Każde gniazdo DIMM obsługuje moduły 512MB / 1GB / 2GB / 4GB / 8GB Maks. wielkość pamięci 16GB Moduł pamięci DDR3 z trybem podwójnego kanału Obsługa DDR3 1600/1333/1066 Brak obsługi Registered DIMM oraz ECC DIMM
Super I/O	ITE 8728 Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Count Funkcje kontroli warunków pracy, Monitor H/W Kontroler/Monitor prędkości wentylatora Funkcja ITE "Smart Guardian"	ITE 8728 Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Count Funkcje kontroli warunków pracy, Monitor H/W Kontroler/Monitor prędkości wentylatora Funkcja ITE "Smart Guardian"
SATA 2	Zintegrowany kontroler Serial ATA Transfer danych do 3.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0.	Zintegrowany kontroler Serial ATA Transfer danych do 3.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0.
LAN	Realtek RTL8111E / RTL8111F Atheros AR8151 10 / 100 / 1000 Mb/s z automatyczną negocjacją szybkości	Realtek RTL8105E Atheros AR8152 10 / 100 Mb/s z automatyczną negocjacją szybkości
Obsługa audio HD	VT1708B / ALC662 Obsługa High-Definition Audio 5.1 kanałowe wyjście audio	VT1708B / ALC662 Obsługa High-Definition Audio 5.1 kanałowe wyjście audio
Gniazda	Gniazdo PCI Express Gen3 x16 (w zależności od procesora) x1	Gniazdo PCI Express Gen3 x16 (w zależności od procesora) x1

	H61MGC		***H61MLC***	
	Gniazdo PCI Express Gen2 x1	x2	Gniazdo PCI Express Gen2 x1	x2
Złącza wbudowane	Złącze Port drukarki	x1	Złącze Port drukarki	x1
	Port szeregowy	x1	Port szeregowy	x1
	Złącze SATA	x4	Złącze SATA	x4
	Złącze panela przedniego	x1	Złącze panela przedniego	x1
	Przednie złącze audio	x1	Przednie złącze audio	x1
	Złącze główkowe wentylatora procesora	x1	Złącze główkowe wentylatora procesora	x1
	Złącze główkowe wentylatora systemowego	x1	Złącze główkowe wentylatora systemowego	x1
	Złącze główkowe kasowania CMOS	x1	Złącze główkowe kasowania CMOS	x1
	Złącze USB 2.0	x2	Złącze USB 2.0	x2
	Złącze zasilania (24 pinowe)	x1	Złącze zasilania (24 pinowe)	x1
	Złącze zasilania (4 pinowe)	x1	Złącze zasilania (4 pinowe)	x1
Back Panel I/O	Klawiatura PS/2	x1	Klawiatura PS/2	x1
	Mysz PS/2	x1	Mysz PS/2	x1
	Port VGA	x1	Port VGA	x1
	Port DVI-D	x1	Port LAN	x1
	Port LAN	x1	Port USB 2.0	x4
	Port USB 2.0	x4	Gniazdo audio	x3
	Gniazdo audio	x3		
Wymiary płyty	175mm (S) X 226 mm (W)		175mm (S) X 226 mm (W)	
Obsługa systemu operacyjnego	Windows XP / Vista / 7 Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.		Windows XP / Vista / 7 Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.	

RUSSIAN

	H61MGC	H61MLC
CPU (центральный процессор)	Socket 1155 Процессор Intel Core i7/i5/i3/Pentium/Celeron Поддержка технологий Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / технологии виртуализация	Socket 1155 Процессор Intel Core i7/i5/i3/Pentium/Celeron Поддержка технологий Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / технологии виртуализация
Набор микросхем	Intel H61	Intel H61
Основная память	Слоты DDR3 DIMM x 2 Каждый модуль DIMM поддерживает 512МБ / 1ГБ / 2ГБ / 4ГБ / 8ГБ DDR3 Максимальная ёмкость памяти 16ГБ Модуль памяти с двухканальным режимом DDR3 Поддержка DDR3 1600/1333/1066 Не поддерживает зарегистрированные модули DIMM and ECC DIMM	Слоты DDR3 DIMM x 2 Каждый модуль DIMM поддерживает 512МБ / 1ГБ / 2ГБ / 4ГБ / 8ГБ DDR3 Максимальная ёмкость памяти 16ГБ Модуль памяти с двухканальным режимом DDR3 Поддержка DDR3 1600/1333/1066 Не поддерживает зарегистрированные модули DIMM and ECC DIMM
Super I/O	ITE 8728 Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости вентилятора/ монитор Функция ITE "Smart Guardian" (Интеллектуальная защита)	ITE 8728 Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости вентилятора/ монитор Функция ITE "Smart Guardian" (Интеллектуальная защита)
SATA 2	Встроенное последовательное устройство управления ATA скорость передачи данных до 3.0 гигабит/с. Соответствие спецификации SATA версия 2.0.	Встроенное последовательное устройство управления ATA скорость передачи данных до 3.0 гигабит/с. Соответствие спецификации SATA версия 2.0.
Локальная сеть	Realtek RTL8111E / RTL8111F Atheros AR8151 Автоматическое согласование 10 / 100 / 1000 Мб/с	Realtek RTL8105E Atheros AR8152 Автоматическое согласование 10 / 100 Мб/с
Звуковая поддержка жесткого диска	VT1708B / ALC662 Звуковая поддержка High-Definition 5.1канальный звуковой выход	VT1708B / ALC662 Звуковая поддержка High-Definition 5.1канальный звуковой выход
Слоты	Слот PCI Express Gen3 x16 (в зависимости от процессора) x1 Слот PCI Express Gen2 x1 x2	Слот PCI Express Gen3 x16 (в зависимости от процессора) x1 Слот PCI Express Gen2 x1 x2

	H61MGC	*H61MLC*
Встроенный разъём	Разъём Порт подключения принтера x1 Последовательный порт x1 Разъём SATA x4 Разъём на лицевой панели x1 Входной звуковой разъём x1 Контактирующее приспособление вентилятора центрального процессора x1 Контактирующее приспособление вентилятора системы x1 Открытое контактирующее приспособление CMOS x1 USB 2.0-разъём x2 Разъем питания (24 вывод) x1 Разъем питания (4 вывод) x1	Разъём Порт подключения принтера x1 Последовательный порт x1 Разъём SATA x4 Разъём на лицевой панели x1 Входной звуковой разъём x1 Контактирующее приспособление вентилятора центрального процессора x1 Контактирующее приспособление вентилятора системы x1 Открытое контактирующее приспособление CMOS x1 USB 2.0-разъём x2 Разъем питания (24 вывод) x1 Разъем питания (4 вывод) x1
Задняя панель средств ввода-вывод а	Клавиатура PS/2 x1 Мышь PS/2 x1 Порт VGA x1 Порт DVI-D x1 Порт LAN x1 USB 2.0-порт x4 Гнездо для подключения наушников x3	Клавиатура PS/2 x1 Мышь PS/2 x1 Порт VGA x1 Порт LAN x1 USB 2.0-порт x4 Гнездо для подключения наушников x3
Размер панели	175мм (Ш) X 226 мм (В)	175мм (Ш) X 226 мм (В)
Поддержка OS	Windows XP / Vista / 7 Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.	Windows XP / Vista / 7 Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.

ARABIC

H61MLC	H61MGC	
Socket 1155 بتردد Intel Core i7/i5/i3/Pentium/Celeron معالجات يصل إلى Execute Disable Bit / Enhanced Intel تدعم تقنيات SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1155 بتردد Intel Core i7/i5/i3/Pentium/Celeron معالجات يصل إلى Execute Disable Bit / Enhanced Intel تدعم تقنيات SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	وحدة المعالجة المركزية
Intel H61	Intel H61	مجموعة الشرائح
قتحة DDR3 DIMM عدد2 سعة تدعم كل قتحة كل DDR3 تدعم ذاكرة من نوع DIMM تدعم كل قتحة ميجا بايت و1/ 512/ سعة DDR3 تدعم ذاكرة من نوع DIMM قتحة و2/ و4/ و8 جيجا بليت سعة ذاكرة قصوى 16 جيجا بليت مزدوجة القناة DDR3 وحدة ذاكرة سعات 1600/1333/1066 ميجا بليت DDR3 تدعم الذاكرة من نوع ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	قتحة DDR3 DIMM عدد2 سعة تدعم كل قتحة كل DDR3 تدعم ذاكرة من نوع DIMM تدعم كل قتحة ميجا بايت و1/ 512/ سعة DDR3 تدعم ذاكرة من نوع DIMM قتحة و2/ و4/ و8 جيجا بليت سعة ذاكرة قصوى 16 جيجا بليت مزدوجة القناة DDR3 وحدة ذاكرة سعات 1600/1333/1066 ميجا بليت DDR3 تدعم الذاكرة من نوع ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	الذاكرة الرئيسية
ITE 8728 الأكثر استخداماً. Super I/O توفر وظيفة Low Pin Count Interface تدعم تقنية وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة ITE من "Smart Guardian" وظيفة	ITE 8728 الأكثر استخداماً. Super I/O توفر وظيفة Low Pin Count Interface تدعم تقنية وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة ITE من "Smart Guardian" وظيفة	Super I/O
متكامل Serial ATA متحكم جيجابت/ثانية. 3.0 نقل البيانات بسرعات تصل إلى 2.0. الإصدار SATA مطابقة لمواصفات	متكامل Serial ATA متحكم جيجابت/ثانية. 3.0 نقل البيانات بسرعات تصل إلى 2.0. الإصدار SATA مطابقة لمواصفات	SATA 2
Realtek RTL8105E Atheros AR8152 تفاوض تلقائي 100/10 ميجا بليت / ثانية	Realtek RTL8111E / RTL8111F Atheros AR8151 تفاوض تلقائي 100/10 ميجا بليت / ثانية و 1 جيجا بت/ثانية	شبكة داخلية
VT1708B / ALC662 تدعم تقنية الصوت عالي التعريف من 5.1 قوات لخرج الصوت	VT1708B / ALC662 تدعم تقنية الصوت عالي التعريف من 5.1 قوات لخرج الصوت	دعم الصوت عالي التعريف
قتحة PCI Express Gen2 x16 عدد 1 قتحة PCI Express Gen2 x1 عدد 2	قتحة PCI Express Gen2 x16 عدد 1 قتحة PCI Express Gen2 x1 عدد 2	القتحات

	H61MGC		H61MLC	
المنافذ على سطح اللوحة	منفذ طابعة	عدد 1	منفذ طابعة	عدد 1
	منفذ تسلسلي	عدد1	منفذ تسلسلي	عدد1
	منفذ SATA	عدد 4	منفذ SATA	عدد 4
	منفذ اللوحة الأمامية	عدد 1	منفذ اللوحة الأمامية	عدد 1
	منفذ الصوت الأمامي	عدد 1	منفذ الصوت الأمامي	عدد 1
	وصلة مروحة وحدة المعالجة المركزية	عدد 1	وصلة مروحة وحدة المعالجة المركزية	عدد 1
	وصلة مروحة النظام	عدد 1	وصلة مروحة النظام	عدد 1
	وصلة مسح CMOS	عدد 1	وصلة مسح CMOS	عدد 1
	منفذ USB 2.0	عدد 2	منفذ USB 2.0	عدد 2
	منفذ توصيل الطاقة (24دبوس) ع	دد 1	منفذ توصيل الطاقة (24دبوس) ع	دد 1
	منفذ توصيل الطاقة (4دبابيس)	عدد 1	منفذ توصيل الطاقة (4دبابيس)	عدد 1
منافذ دخل/خرج اللوحة الخلفية	لوحة مفاتيح PS/2	عدد 1	لوحة مفاتيح PS/2	عدد 1
	ماوس PS/2	عدد 1	ماوس PS/2	عدد 1
	منافذ VGA	عدد 1	منافذ VGA	عدد 1
	منافذ DVI-D	عدد 1	منفذ شبكة اتصال محلية	عدد 1
	منفذ شبكة اتصال محلية	عدد 1	منافذ 2.0USB	عدد 4
	منافذ 2.0USB	عدد 4	مقبس صوت	عدد 3
	مقبس صوت	عدد 3		
حجم اللوحة	175مم (عرض) X 226مم (ارتفاع)		175مم (عرض) X 226مم (ارتفاع)	
دعم أنظمة التشغيل	Windows XP / Vista / 7 تحتفظ Biostar بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو بدون إخطار.		Windows XP / Vista / 7 تحتفظ Biostar بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو بدون إخطار.	

JAPANESE

	H61MGC	H61MLC
CPU	Socket 1155 Intel Core i7/i5/i3/Pentium/Celeron プロセッサ Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technologyをサポートします	Socket 1155 Intel Core i7/i5/i3/Pentium/Celeron プロセッサ Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technologyをサポートします
チップセット	Intel H61	Intel H61
メインメモリ	DDR3 DIMMスロット x 2 各DIMMは 512MB / 1GB / 2GB / 4GB / 8GB DDR3をサポート 最大メモリ容量16GB デュアル チャンネルモードDDR3 メモリモジュール DDR3 1600/1333/1066をサポート 登録済みDIMMとECC DIMMはサポートされません	DDR3 DIMMスロット x 2 各DIMMは 512MB / 1GB / 2GB / 4GB / 8GB DDR3をサポート 最大メモリ容量16GB デュアル チャンネルモードDDR3 メモリモジュール DDR3 1600/1333/1066をサポート 登録済みDIMMとECC DIMMはサポートされません
Super I/O	ITE 8728 もっとも一般に使用されるレガシーSuper I/O機能を採用しています。 低ピンカウントインターフェイス 環境コントロールイニシアチブ、 H/Wモニター ファン速度コントローラ/ モニター ITEの「スマートガーディアン」機能	ITE 8728 もっとも一般に使用されるレガシーSuper I/O機能を採用しています。 低ピンカウントインターフェイス 環境コントロールイニシアチブ、 H/Wモニター ファン速度コントローラ/ モニター ITEの「スマートガーディアン」機能
SATA 2	統合シリアルATA コントローラ 最高3.0 Gb/秒のデータ転送速度 SATAバージョン2.0仕様に準拠。	統合シリアルATA コントローラ 最高3.0 Gb/秒のデータ転送速度 SATAバージョン2.0仕様に準拠。
LAN	Realtek RTL8111E / RTL8111F Atheros AR8151 10 / 100 / 1000 Mb/秒のオートネゴシエーション	Realtek RTL8105E Atheros AR8152 10 / 100 Mb/秒のオートネゴシエーション
HDオーディオのサポート	VT1708B / ALC662 ハイデフィニションオーディオのサポート 5.1 チャンネルオーディオアウト	VT1708B / ALC662 ハイデフィニションオーディオのサポート 5.1 チャンネルオーディオアウト
スロット	PCI Express Gen3 x16スロット（CPUに依存） x1	PCI Express Gen3 x16スロット（CPUに依存） x1

	H61MGC		***H61MLC***	
	PCI Express Gen2 x1スロット	x2	PCI Express Gen2 x1スロット	x2
オンボードコネsクタ	プリンタポートコネクタ	x1	プリンタポートコネクタ	x1
	シリアルポート	x1	シリアルポート	x1
	SATAコネクタ	x4	SATAコネクタ	x4
	フロントパネルコネクタ	x1	フロントパネルコネクタ	x1
	フロントオーディオコネクタ	x1	フロントオーディオコネクタ	x1
	CPUファンヘッダ	x1	CPUファンヘッダ	x1
	システムファンヘッダ	x1	システムファンヘッダ	x1
	CMOSクリアヘッダ	x1	CMOSクリアヘッダ	x1
	USB 2.0コネクタ	x2	USB 2.0コネクタ	x2
	電源コネクタ(24ピン)	x1	電源コネクタ(24ピン)	x1
	電源コネクタ(4ピン)	x1	電源コネクタ(4ピン)	x1
背面パネルI/O	PS/2キーボード	x1	PS/2キーボード	x1
	PS/2マウス	x1	PS/2マウス	x1
	VGAポート	x1	VGAポート	x1
	DVI-Dポート	x1		
	LANポート	x1	LANポート	x1
	USB 2.0ポート	x4	USB 2.0ポート	x4
	オーディオジャック	x3	オーディオジャック	x3
ボードサイズ	175mm (幅) X 226 mm (高さ)		175mm (幅) X 226 mm (高さ)	
OSサポート	Windows XP / Vista / 7 Biostarは事前のサポートなしにOSサポートを追加または削除する権利を留保します。		Windows XP / Vista / 7 Biostarは事前のサポートなしにOSサポートを追加または削除する権利を留保します。	

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